

Rec'd PCT/PTO 11 MAY 2005

PATENT COOPERATION TREATY

PCT

REC'D 14 SEP 2004

WIPO PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

(Rationalised Report according to the Notice of the President of the EPO published in the OJ11/2001)

Applicant's or agent's file reference 4 -33376A/SCR	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP03/12709	International filing date (day/month/year) 13/11/2003	Priority date (day/month/year) 14/11/2002
International Patent Classification (IPC) or national classification and IPC C12N9/00		
Applicant NOVARTIS AG et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.


2. This **REPORT** consists of a total of 2 sheets, including this cover sheet.

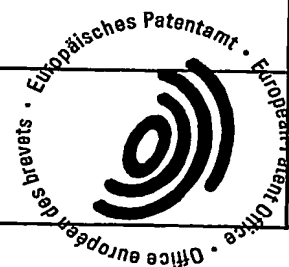
☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consists of a total of _____ sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☒ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 21/05/2004	Date of completion of this report 08/09/2004
Name and mailing address of the IPEA/  European Patent Office D-80298 Munich Tel. (+49-89) 2399-0, Tx: 523656 epmu d Fax: (+49-89) 2399-4465	Authorized officer EIDEN F A Tel. (+49-89) 2399 2828



**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No.

PCT/EP03/12709

I. Basis of the report

The basis of this international preliminary examination is the application as originally filed.

III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The question of whether the claimed invention appears to be novel, to involve an inventive step, or to be industrially applicable has not been the subject of the international preliminary examination in respect of the claims which have not been searched (Article 17(2)(a) or (3) and Rule 66.1(e) PCT); see also international search report).

V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability

To the extent that the international preliminary examination has been carried out (see item III above), the following is pointed out:

In light of the documents cited in the international search report, it is considered that the invention as defined in at least some of the claims, which have been the subject of an international search report, does not appear to meet the criteria mentioned in Article 33(1) PCT, i.e. does not appear to be novel and/or to involve an inventive step (see international search report, in particular the documents cited X and/or Y and corresponding claim references).

INTERNATIONAL SEARCH REPORT

Rec'd PCT/TO 11 MAY 2005

International Application No
PCT/EP 03/12709

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C12N9/00 A61P31/04 A61P31/12 //C07K16/12,C07K16/08

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C07K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, WPI Data, MEDLINE, EMBASE, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 02 22573 A (JONES LYN H ;SCRIPPS RESEARCH INST (US); WENTWORTH ANITA D (US); J) 21 March 2002 (2002-03-21) page 8, line 5 - line 8 page 19, line 23 - line 24 page 32; claim 55 page 11	1-47
X	WO 02 074812 A (HAREL JOSEE ;UNIV MONTREAL (CA); GIRARD FRANCIS (CA); FAIRBROTHER) 26 September 2002 (2002-09-26) page 23	1,10-15, 21,29-34
X	WO 02 059154 A (ABGENIX INC ;HE YUXIAN (US); CORVALAN JOSE R (US); PINTER ABRAHAM) 1 August 2002 (2002-08-01) page 111, line 11 - line 12	1,16-21, 25-39

-/--

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- *Z* document member of the same patent family

Date of the actual completion of the international search

2 March 2004

Date of mailing of the international search report

19/03/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax (+31-70) 340-3016

Authorized officer

Wagner, R

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/12709

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>WENTWORTH PAUL JR ET AL: "Antibody catalysis of the oxidation of water" SCIENCE (WASHINGTON D C), vol. 293, no. 5536, 7 September 2001 (2001-09-07), pages 1806-1811, XP002272072 ISSN: 0036-8075, sentence 1</p>	1-47
P, X	<p>ANONYMOUS - THE SCRIPPS RESEARCH INSTITUTE: "Ozone is produced by antibodies during bacterial killing and in inflammation, Say Scientists at the Scripps Research Institute" INTERNET ARTICLE - PRESS RELEASE, 'Online! 14 November 2002 (2002-11-14), XP002272074 Retrieved from the Internet: <URL:www.scripps.edu/news/press/111402.htm > 'retrieved on 2004-03-02! the whole document</p>	1-47
P, A	<p>BABIOR BERNARD M ET AL: "Investigating antibody-catalyzed ozone generation by human neutrophils." PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES, vol. 100, no. 6, 18 March 2003 (2003-03-18), pages 3031-3034, XP002272073 March 18, 2003 ISSN: 0027-8424 (ISSN print) abstract</p>	1-47

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP 03/12709

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
Although claims 21-47 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 03/12709

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0222573	A	21-03-2002	AU 1297002 A CA 2422586 A1 EP 1367998 A2 WO 0222573 A2	26-03-2002 21-03-2002 10-12-2003 21-03-2002
WO 02074812	A	26-09-2002	CA 2339436 A1 WO 02074812 A2 EP 1368379 A2	15-09-2002 26-09-2002 10-12-2003
WO 02059154	A	01-08-2002	CA 2436091 A1 EP 1373318 A2 WO 02059154 A2	01-08-2002 02-01-2004 01-08-2002